

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A ferreed sorbent having a ferromagnetic core, with one of a single layer coat[[,]] or a double layer coat ~~and no coat~~, comprising: the core made in a form of a flake with dimensions in a plane of (500-5000) ~~me~~ μm and with a thickness of (0.1-1000) ~~me~~ μm, wherein the plane dimension of the flake is greater than the thickness.

2. (Currently Amended) The ferreed sorbent of claim 1 wherein the core is made of one of iron, iron oxides, nickel, iron-nickel alloy, iron-titanium alloy, nickel–titanium alloy, iron-tantalum alloy, nickel-tantalum alloy, iron-nickel-titanium alloy, or ~~and~~ iron-nickel-tantalum alloy.

3. (Currently Amended) The ferreed sorbent of claim 2, wherein a one-layer coat is made of one of carbon, aluminium oxides, disilcon oxide, zirconium dioxide, ~~dextrane, sephadex~~ dextran, gelatin, albumin, polysaccharide, amylum, ion-exchange resins, cations or ~~and~~ anions.

4. (Currently Amended) The ferreed sorbent of claim 2, wherein a double-layer coat has an inner layer made of one of carbon, aluminium oxides, disilcon oxide, and zirconium dioxide, and an outer layer of the coat is made of one of ~~dextrane, sephadex~~ dextran, gelatin, albumin, polysaccharide, amylum, ion-exchange resins, cations or ~~and~~ anions.

5. (Original) The ferreed sorbent according to claim 4, wherein the outer layer of the coat is made by one of conjugation with antibodies, modification with a pharmaceutical preparation, including one of antibiotics, phthalhydrazide salines, 5-amino-2,3-dihydro-1,4-dione salines, and fermented.

6. (Currently Amended) The A method of extraction of the ferreed sorbent of claim 2, comprising ~~wherein a method for extracting the ferreed sorbent includes:~~ a powder of at least one of iron, nickel, titanium, or and tantalum is at least one of volatiled or and fused in a low-temperature plasma at a first temperature of  $10^4 \times (0.5-5) [^\circ\text{K}]$  K, and at least one of received vaporous and fused particles of one of respected metals product and respected metals alloys product is quenched and condensed in a gas flow, and then the product is precipitated in a form of one of crystals and respected metals alloys microbars, is transferred into a dispersion medium containing stabilizer and while being mixed is sustained within (5-15) hours at a second temperature of  $(50-90)^\circ\text{C}$  and at a residual pressure of (1-5) ~~MmmHg~~ mmHg until an end of a gas liberation, then the one of the crystals or and the microbars are treated by flattening into flakes of a specified thickness which then repeatedly (up to 10 times) are washed in distilled water and then weak parts of the flakes are removed by exposing to ultrasound at a  $(200-300) [Vt]$  W/cm<sup>2</sup> intensity, then received flakes are dried in a hot air sterilizer at a third

temperature of (80-110)°C, then dried flakes are fractionated in one of an inert gas flow with a velocity of (0.02-1.00) m/s at an exposure of a magnetic field with an intensity of (10-10<sup>3</sup>) A/m and by centrifugation, and then sorbent cores of a specified dimensions are educed, on which coats are formed layer-by-layer, and a received end product is packed in a light-proof hermetically sealed container and sterilized, and a sorbent is received after fractionation is the end product.

7. (Currently Amended) The ~~ferreed-sorbent~~ method of claim 6, wherein a first closest layer to a core layer of the coat is formed by thermal treatment of the fractionated flakes at (1000-1500)° C in the inert gas flow containing microparticles of one of carbon, silicon oxide, aluminium oxide, or ~~and~~ zirconium oxide.

8. (Currently Amended) The ~~ferreed-sorbent~~ method as of claim 6, wherein a first layer of the coat is formed though mixing using an ultrasound exposure to the fractionated flakes suspension within (1-10) minutes in a heated aqueous solution of one of ~~dextrane~~ dextran, gelatin, albumin, or ~~and~~ amylum up to (30-80)° C with subsequent quenching of the suspension down to (4-10)° C, and a received precipitate is filled up with a formalin and sustained therein within (10-40) minutes while simultaneously

mixing, then is thoroughly [~~dried~~] dried out at (25-50)° C, and is grinded, and the received end product is filtered in a magnetic field.

9. (Currently Amended) The ~~ferreed-sorbent~~ method of claim 6, wherein the first layer of the coat is formed by adding an ion-exchange resin into the suspension of fractionated flakes in distilled water at (40-60)° C, with subsequent cooling of the above suspension down to the temperature of (15-30)° C and adding nitrous acid (HNO<sub>2</sub>) diluted in water, sustaining within (10-15) minutes, cooling down to (4-10)° C and extracting of a precipitate which then is washed in the physiological solution, and buffered in an aqueous solution of a blend of NH<sub>4</sub> OH foundation and NH<sub>4</sub>Cl saline.

10. (Currently Amended) The ~~ferreed-sorbent~~ method of claim 6, wherein the second layer of the coat is formed though mixing by ultrasound exposure within (1-10) minutes to a ferromagnetics suspension covered with one of carbon, silicon oxide, aluminium oxide, or ~~and~~ zirconium oxide coating in a (30-80)°C aqueous solution of one of ~~dextrane~~ dextran, gelatin, albumin, or ~~and~~ amylum with subsequent cooling of the suspension to (4-10)° C, and the received precipitate is filled up with formalin and sustained therein within (10-40) minutes while simultaneously being mixed, and then is thoroughly dried out at (25-50)° C, and grinded and the received end product is filtered in a magnetic field.

11. (Currently Amended) The ~~ferreed-sorbent~~ method of claim 6, wherein the second layer of the coat is formed by adding an ion-exchange resin into suspension in distilled water of ferromagnetics covered with one of a carbon, silicon oxide, aluminium oxide, or ~~and~~ zirconium oxide coating heated to (40-60)°C, with subsequent cooling of the suspension down to (15-30)°C, and adding while being mixed albumin with subsequent adding of nitrous acid (HNO<sub>2</sub>) diluted in water, sustaining within (10-15) minutes, cooling down to (4-10)° C and extracting a precipitate which then is activated by sustaining within (1.5-2) hours in a modifier solution, washed in a physiological solution, and buffered to reach a pH 4.0-0.5 in an aqueous solution of a blend of NH<sub>4</sub> OH foundation and NH<sub>4</sub>Cl saline.

12. (Currently Amended) The ~~ferreed-sorbent~~ method of claim 11, wherein one of a sodium periodate (NaIO<sub>4</sub>) or ~~and~~ a glutaric dialdehyde in (3-10)% aqueous solution of Na<sub>2</sub>SO<sub>4</sub> is used as a modifier.

13. (Currently Amended) The ~~ferreed-sorbent~~ method of claim 11, wherein while forming the outer layer of the coat the outer layer is conjugated with antibodies by adding into the aqueous suspension of ferreed sorbent with one of the single layer coating and the double layer coating, the outer layer is made of one of sephadex or ~~and~~ albumin and modified with one of glutaric dialdehyde or ~~and~~ sodium periodate of serum containing antibodies specific to an

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antigen being sorbed in a buffered fluid with a pH of 6.5-10, further sustaining of the composition while being mixed within (1-3) hours at (15-25)° C, subsequently adding sodium borhydrate into the composition, cooling to (4-10)° C, and repeated sustaining while mixing within (1-3) hours, extraction of the precipitate and its buffering and drying out.

14. (Currently Amended) The ~~ferreed—sorber~~ method of claim 11, wherein while forming the outer layer of the coat the outer layer is modified by a pharmaceutical preparation by heating the suspension of the ferreed sorber with the one of the single layer coating or ~~and~~ the double layer coating, the outer layer made of one of ~~dextrane~~ dextran or ~~and~~ gelatin heated to (35-70)° C in a physiological solution and adding a pharmaceutical preparation powder and sustaining while thoroughly being mixed at (0.5-2.5) hours, then cooling the compound to (4-10)° C, decanting of a supernatant fluid in a magnetic field, and washing the precipitate in running distilled water and then drying out.

15. (Currently Amended) The ~~ferreed—sorber~~ method of claim 11, wherein while forming the outer layer of the coat the outer layer is modified through preliminary dilution of urease crystals in a polyether, immixture of the composition with suspension in distilled water of the ferreed sorber with the coating made of sephadex, then sustaining while being mixed at (25-40)° C within

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(2-5) hours and cooling to (4-10)° C, then adding a formaldehyde and repeated sustaining within (1-3) hours, and removal of a supernatant fluid under exposure of a magnetic field and then precipitate drying out.

16. (Currently Amended) The ~~ferreed—sor bent~~ method of claim 11, wherein while forming the outer layer of the coat the outer layer is modified through heating of an aqueous suspension of the ferreed sorbent with the coating made of ~~dextrane~~ dextran, up to (40-70)° C, with subsequent immixturing with one of zirconium saline powder and phthalhydrazide saline, and a (50-120) [[Vt]] W/cm<sup>2</sup> intensity ultrasound exposure within (1-10) minutes, cooling of the received blend to (4-10)° C, adding the formaldehyde, sustaining while being mixed within (1-3) hours, and removal of supernatant fluid under the exposure of a magnetic field and then drying out the precipitate.

17. (Currently Amended) The ferreed sorbent of claim 1, wherein a one-layer coat is made of one of carbon, aluminium oxides, disilcon oxide, zirconium dioxide, ~~dextrane, —sephadex~~ dextran, gelatin, albumin, polysaccharide, amylum, ion-exchange resins, cations and anions.

18. (Original) The ferreed sorbent of claim 1, wherein a double-layer coat has an inner layer made of one of carbon, aluminium oxides, disilcon



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oxide, and zirconium dioxide, and an outer layer of the coat is made of one of ~~dextrane, —sephadex~~ dextran, gelatin, albumin, polysaccharide, amylum, ion-exchange resins, cations and anions.

19. (Original) The ferreed sorbent according to claim 1, wherein an outer layer of the coat is made by one of conjugation with antibodies, modification with a pharmaceutical preparation, including one of antibiotics, phthalhydrazide salines, 5-amino-2,3-dihydro-1,4-dione salines, and fermented.

20. (Currently Amended) ~~The~~ A method of extraction of the ferreed sorbent of claim 1, comprising ~~wherein a method for extracting the ferreed sorbent includes:~~ a powder of at least one of iron, nickel, titanium, and tantalum is at least one of volatiled and fused in a low-temperature plasma at a first temperature of  $10^4 \times (0.5-5) [^\circ\text{K}]$  K, and at least one of received vaporous and fused particles of one of respected metals product and respected metals alloys product is quenched and condensed in a gas flow, and then the product is precipitated in a form of one of crystals and respected metals alloys microbars, is transferred into a dispersion medium containing stabilizer and while being mixed is sustained within (5-15) hours at a second temperature of (50-90)°C and at a residual pressure of (1-5) ~~MmmHg~~ mmHg until an end of a gas liberation, then the one of the crystals and the microbars are treated by flattening into flakes of a specified thickness which then



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repeatedly (up to 10 times) are washed in distilled water and then weak parts of the flakes are removed by exposing to ultrasound at a (200-300)  $[[Vt]] \text{ W/cm}^2$  intensity, then received flakes are dried in a hot air sterilizer at a third temperature of (80-110)°C, then dried flakes are fractionated in one of an inert gas flow with a velocity of (0.02-1.00) m/s at an exposure of a magnetic field with an intensity of (10-10<sup>3</sup>) A/m and by centrifugation, and then sorbent cores of a specified dimensions are educed, on which coats are formed layer-by-layer, and a received end product is packed in a light-proof hermetically sealed container and sterilized, and a sorbent received after fractionation is the end product.

21. (Currently Amended) The ~~ferreed—sorbent~~ method of claim 20, wherein a first closest layer to a core layer of the coat is formed by thermal treatment of the fractionated flakes at (1000-1500)° C in the inert gas flow containing microparticles of one of carbon, silicon oxide, aluminium oxide, and zirconium oxide.

22. (Currently Amended) The ~~ferreed—sorbent~~ method of claim 20, wherein a first layer of the coat is formed though mixing using an ultrasound exposure to the fractionated flakes suspension within (1-10) minutes in a heated aqueous solution of one of ~~dextrane~~ dextran, gelatin, albumin, and amylum up to (30-80)° C with subsequent quenching of the suspension down to (4-10)° C,

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and a received precipitate is filled up with a formalin and sustained therein within (10-40) minutes while simultaneously mixing, then is thoroughly dried out at (25-50)° C, and is grinded, and the received end product is filtered in a magnetic field.

23. (Currently Amended) The ~~ferreed—sor bent~~ method of claim 20, wherein the first layer of the coat is formed by adding an ion-exchange resin into the suspension of fractionated flakes in distilled water at (40-60)° C, with subsequent cooling of the above suspension down to the temperature of (15-30)° C and adding nitrous acid (HNO<sub>2</sub>) diluted in water, sustaining within (10-15) minutes, cooling down to (4-10)° C and extracting of a precipitate which then is washed in the physiological solution, and buffered in an aqueous solution of a blend of NH<sub>4</sub> OH foundation and NH<sub>4</sub>Cl saline.

24. (Currently Amended) The ~~ferreed—sor bent~~ method of claim 20, wherein the second layer of the coat is formed though mixing by ultrasound exposure within (1-10) minutes to a ferromagnetics suspension covered with one of carbon, silicon oxide, aluminium oxide, and zirconium oxide coating in a (30-80)° C aqueous solution of one of ~~dextrane~~ dextran, gelatin, albumin, and amyllum with subsequent cooling of the suspension to (4-10)° C, and the received precipitate is filled up with formalin and sustained therein within (10-40) minutes

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while simultaneously being mixed, and then is thoroughly dried out at (25-50)° C, and grinded and the received end product is filtered in a magnetic field.

25. (Currently Amended) The ~~ferreed—sor bent~~ method of claim 20, wherein the second layer of the coat is formed by adding an ion-exchange resin into suspension in distilled water of ferromagnetics covered with one of a carbon, silicon oxide, aluminium oxide, and zirconium oxide coating heated to (40-60)° C, with subsequent cooling of the suspension down to (15-30)° C, and adding while being mixed albumin with subsequent adding of nitrous acid (HN0<sub>2</sub>) diluted in water, sustaining within (10-15) minutes, cooling down to (4-10)° C and extracting a precipitate which then is activated by sustaining within (1.5-2) hours in a modifier solution, washed in a physiological solution, and buffered to reach a pH 4.0-0.5 in an aqueous solution of a blend of NH<sub>4</sub> OH foundation and NH<sub>4</sub>Cl saline.

26. (Currently Amended) The ~~ferreed—sor bent~~ method of claim 25, wherein one of a sodium periodate (NaIO<sub>4</sub>) and a glutaric dialdehyde in (3-10)% aqueous solution of Na<sub>2</sub>S0<sub>4</sub> is used as a modifier.

27. (Currently Amended) The ~~ferreed—sor bent~~ method of claim 20, wherein while forming the outer layer of the coat the outer layer is conjugated with antibodies by adding into the aqueous suspension of ferreed sor bent

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with one of the single layer coating and the double layer coating, the outer layer is made of one of sephadex and albumin and modified with one of glutaric dialdehyde and sodium periodate of serum containing antibodies specific to an antigen being sorbed in a buffered fluid with a pH of 6.5-10, further sustaining the composition while being mixed within (1-3) hours at (15-25)° C, subsequently adding sodium borhydrate into the composition, cooling to (4-10)° C, and repeated sustaining while mixing within (1-3) hours, extraction of the precipitate and its buffering and drying out.

28. (Currently Amended) The ~~ferreed—sorber~~ method of claim 20, wherein while forming the outer layer of the coat the outer layer is modified by a pharmaceutical preparation by heating the suspension of the ferreed sorber with the one of the single layer coating and the double layer coating, the outer layer made of one of ~~dextrane~~ dextran and gelatin heated to (35-70)° C in a physiological solution and adding a pharmaceutical preparation powder and sustaining while thoroughly being mixed at (0.5-2.5) hours, then cooling the compound to (4-10)° C, decanting of a supernatant fluid in a magnetic field, and washing the precipitate in running distilled water and then drying out.

29. (Currently Amended) The ~~ferreed—sorber~~ method of claim 20, wherein while forming the outer layer of the coat the outer layer is

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modified through preliminary dilution of urease crystals in a polyether, immixture of the composition with suspension in distilled water of the ferreed sorbent with the coating made of sephadex, then sustaining while being mixed at (25-40)°C within (2-5) hours and cooling to (4-10)° C, then adding a formaldehyde and repeated sustaining within (1-3) hours, and removal of a supernatant fluid under exposure of a magnetic field and then precipitate drying out.

30. (Currently Amended) The ~~ferreed—sorbent~~ method of claim 20, wherein while forming the outer layer of the coat the outer layer is modified through heating of an aqueous suspension of the ferreed sorbent with the coating made of ~~dextrane~~ dextran, up to (40-70)° C, with subsequent immixturing with one of zirconium saline powder and phthalhydrazide saline, and a (50-120) Vt/cm intensity ultrasound exposure within (1-10) minutes, cooling of the received blend to (4-10)°C, adding the formaldehyde, sustaining while being mixed within (1-3) hours, and removal of supernatant fluid under the exposure of a magnetic field and then drying out the precipitate.